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BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SELBY, GEVELL V	
			ART UNIT	PAPER NUMBER
			2615	8

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/630,390

Applicant(s)

MIZUMURA, HIROSHI

Examiner

Gevell Selby

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 3, paragraph 2 to page 4, paragraph 2, filed on 6-14-04, with respect to the rejection(s) of claim(s) 1-13 under 35 U.S.C. 103(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kasuya, US 6,134,390, Uchida, US 5,929,904, and Masunaga et al., US 5,838,368.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasuya, US 6,134,390.**

In regard to claim 9, Kasuya, US 6,134,390, discloses a lens apparatus, comprising:

a focus lens (see figure 1, element 10);

a zoom lens (see figure 1, element 6);

a controller (see figure 1, element 3); and

a control part (see figure 1, element 5, 9, 7,11) which executes a control for moving the zoom lens based on a control signal provided from the controller and executes a control based on a view angle correction function for moving the zoom lens to a position to prevent changing of a view angle due to moving of the focus lens (see column 3, lines 1-34),

wherein the controller obtains, from the control part, a position signal representing a position of the zoom lens (see column 3, lines 14-20),

wherein the control part obtains, from the controller, a control signal for moving the zoom lens to a target position set by the controller according to the position signal (see column 4, lines 1-5 and 21-25),

wherein the control part comprises a position signal fixing device (see figure 1 element 3) which fixes, when executing the control based on the view angle correction function, a value of the position signal outputted from the control part to the controller to a value representing a position of the zoom lens before executing the control based on the view angle correction function (see column 3, lines 1-34).

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In regard to claim 10, Kasuya, US 6,134,390, discloses the lens apparatus as defined in claim 9, wherein the position of the zoom lens before executing the control based on the view angle correction function is a position where the zoom lens is stopped by the control based on the control signal provided from the controller (see column 3, lines 30-41: The arithmetic unit controls the stopping and starting of the zoom lens before during and after view angle correction).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-4 and 14-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasuya, US 6,134,390 in view of Uchida, US 5,929,904.**

In regard to claim 1, Kasuya, US 6,134,390, discloses a lens system (see figure 1), comprising:

a lens apparatus including a movable lens (see figure 1, elements 6 and 10) and a motor (see figure 1, elements 5 and 9), one of a position and a moving rate of the movable lens being controlled with the motor (see column 2, lines 39-50);
a controller connected with the lens apparatus (see figure 1, elements z and F); and

a control part mounted in one of the lens apparatus and the controller (see figure 1, element 3),

wherein the lens system executes a control of the movable lens based on one of a control function provided in the lens apparatus (see column 3, lines 14, 34) and a control function provided in the controller (see column 2, lines 28-37),

wherein the control part obtains contents of a control of the movable lens based on the one of the control functions, and the control part executes the control of the movable lens based on the obtained contents of the control (see column 3, lines 14-34),

wherein the control function provided in the lens apparatus includes a view angle correction function which is an operation of moving a zoom lens to prevent a change of a view angle due to moving of a focus lens (see column 1, lines 60-66).

The Kasuya reference does not disclose:

wherein the control function provided in the controller includes at least one of a shot function and a limit function, wherein the shot function is an operation of controlling the zoom from a current zoom setting to a preset zoom setting, and wherein the limit function is an operation of controlling zoom to restrict the zoom settings to a preset range.

Uchida, US 5,929,904, discloses a camera with a lens system with a shot function wherein the camera moves to a preset location and zoom setting when one of the preset buttons is pressed (see column 7, lines 4-37) and a limit function wherein the zooming of

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the camera is controlled by the telephoto button (52) and a wide angle button (54) to zoom (see column 3, lines 31-35: It is inherent that the zoom function is operated within a preset maximum and minimum zoom range according to the specifications on the zoom lens.)

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, to have at least one of a control function or limit function as claimed in claim 1, in order to make the camera easier to use by zooming to a preset setting by pressing a button.

In regard to claim 2, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens system as defined in claim 1. The Kasuya reference discloses that the control of the movable lens includes a control of a zoom lens (see figure 1, element 6 and column 2, lines 39-44).

In regard to claim 3, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens system as defined in claim 1, wherein the zoom lens moves to and stops at a shot position by the control based on the shot function (see Uchida: see figure 6 and column 6, line 65 to column 7, lines 3), the control part validates the control based on the view angle function (see column 1, lines 60-64).

In regard to claim 4, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904,, discloses the lens system as defined in claim 2. The Kasuya reference and the Uchida reference do not disclose that the control part executes the control based on the limit function prior to the view angle correction function in a case where the zoom lens moves

to an outside of a limit position based on the limit function by executing the control based on the view angle correction function.

Official Notice is taken that it is well known of the art to move the zoom lens to the correct position before performing view angle correction because any corrections made before moving the lens would be invalid and have to be correct again, thus only one correction is needed when performed afterwards.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention of configure the Kasuya reference to have the control part execute the control based on the limit function prior to the view angle correction function as claimed in claim 4, in order to prevent the need for multiple view angle corrections.

In regard to claims 14 and 30, Kasuya, US 6,134,390, discloses a lens control system and method for controlling the system, comprising:

- a zoom lens (see figure 1 , element 6); and

- a controller configured to control a movement of the zoom lens according to a priority of performing a view angle correction function, wherein the view angle correction function is an operation of moving the zoom lens to prevent a change of a view angle due to moving of a focus lens.

The Kasuya reference does not disclose at least one of a limit function and a shot function, wherein the shot function is an operation of controlling the movement of the zoom lens from a current position to a preset position, and wherein the limit function is an operation of restricting the movement of the zoom lens to a preset range.

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Uchida, US 5,929,904, discloses a camera with a lens system with a shot function wherein the camera moves to a preset location and zoom setting when one of the preset buttons is pressed (see column 7, lines 4-37) and a limit function wherein the zooming of the camera is controlled by the telephoto button (52) and a wide angle button (54) to zoom (see column 3, lines 31-35: It is inherent that the zoom function is operated within a preset maximum and minimum zoom range according to the specifications on the zoom lens.)

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, to have at least one of a control function or limit function as claimed in claim 1, in order to make the camera easier to use by zooming to a preset setting by pressing a button.

In regard to claims 15 and 31, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens system and method for controlling the system as defined in claims 14, 30, respectively. The Kasuya reference and the Uchida reference do not disclose that the controller is configured to perform the shot function prior to performing the view angle correction function when the shot function is activated, and wherein the view angle correction function is performed based on the image of the object after performing the shot function.

Official Notice is taken that it is well known of the art to move the zoom lens to the correct position before performing view angle correction because any corrections

made before moving the lens would be invalid and have to be correct again, thus only one correction is needed when performed afterwards.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention of configure the Kasuya reference to have the control part execute the control based on the shot function prior to the view angle correction function as claimed in claim 4, in order to prevent the need for multiple view angle corrections.

In regard to claims 16 and 32, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens system and method for controlling the system as defined in claims 15 and 30, respectively. The Kasuya reference discloses that the controller is configured to control a zoom lens movement rate based on a difference between the preset position and the current position (see column 3, lines 61-67).

In regard to claims 17 and 33, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens system and method for controlling the system as defined in claims 16 and 32, respectively. The Kasuya reference discloses further comprising:

a zoom lens movement rate limit setting device configured to set a zoom lens movement rate limit, wherein the controller is configured to control the zoom lens movement rate also based on the zoom lens movement rate limit (see column 4, lines 5-25).

In regard to claims 18, 25, 34 and 41 the Kasuya and Uchida references do not disclose that the zoom lens movement rate limit setting device is manually settable.

Official Notice is taken that it is well known in the art to make manual functions automatic and automatic functions manual in order to produce the same result.

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Therefore, it would have been an obvious design decision for one of ordinary skill in the art to configure the Kasuya reference to make the zoom lens movement rate limit setting device and the telephoto and wide photo limits are manually settable in order to give the user more control over the cameras functions.

In regard to claims 19 and 35, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 14 and 30, respectively. It is implied in the Uchida reference that the controller is configured to restrict the movement of the zoom lens to the preset range when performing the view angle correction function when the limit function is activated because the zoom lens cannot move outside the preset maximum and minimum setting of the telephoto and wide-angle buttons (see column 3, lines 31-35).

In regard to claims 20 and 36, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 14 and 30, respectively. The Kasuya reference does not disclose that the controller is configured to restrict the movement of the zoom lens to the preset range when performing the shot function when the limit function is activated. The Uchida reference discloses a zoom or limit function (see column 3, lines 31-40) wherein it is inherent that the zoom function is operated within a preset maximum and minimum zoom range according to the specifications on the zoom lens.

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, to have the controller is configured to restrict the movement of the zoom lens

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to the preset range when performing the shot function when the limit function is activated, in order to keep the lens in the operable range so that picture can always be captured.

In regard to claims 21 and 37, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 14 and 30, respectively. The Kasuya reference discloses further comprising:

a manual zoom device (see figure 1, element Z) configured to respond to a manual zoom input and output a corresponding manual zoom control signal,

wherein the controller is configured to control the movement of the zoom lens in response to the manual zoom output signal (see column 2, lines 60-64).

In regard to claims 22 and 38, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 21 and 37, respectively. It is implied by Uchida that the controller is configured to restrict the movement of the zoom lens to the preset range when controlling the movement of the zoom lens in response to the manual zoom output signal when the limit function is activated (see column 3, lines 31-35: It is implied that the zoom function is operated within a preset maximum and minimum zoom range according to the specifications on the zoom lens.)

In regard to claims 23 and 39, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 21 and 37, respectively. The Kasuya and Uchida references do not

disclose that the manual zoom control signal includes a manual zoom rate signal, and wherein the controller is configured to control a zoom lens movement rate based on the manual zoom rate signal.

Official Notice is taken that it is well known in the art to that manual zoom controls are pressure sensitive to include a manual zoom rate signal according to the amount of pressure applied to the button for the control to use to set the zoom rate in order to provide the user with more control over the camera function.

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to configure the Kasuya reference to have a pressure sensitive manual zoom button wherein the manual zoom control signal includes a manual zoom rate signal, and wherein the controller is configured to control a zoom lens movement rate based on the manual zoom rate signal in order in order to provide the user with more control over the camera function.

In regard to claims 24 and 40, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 23 and 39, respectively. It is implied that the pressure sensitive zoom button as described in regard to claim 22 above is a zoom lens movement rate limit setting device configured to set a zoom lens movement rate limit, wherein the controller is configured to control the zoom lens movement rate based on the zoom lens movement rate limit.

In regard to claims 26 and 42, Kasuya, US 6,134,390, in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as

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defined in claims 14 and 30, respectively. The Uchida reference discloses further comprising a shot function setting device configured to set at least one preset position for the shot function (see column 7, lines 4-37).

In regard to claims 27 and 43, Kasuya, US 6,134,390, in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 26 and 42, respectively. The Uchida reference discloses that at least one preset position is manually settable (see column 7, lines 4-37).

In regard to claims 28 and 44, Kasuya, US 6,134,390, in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 14 and 30, respectively. The Uchida reference discloses a limit function setting device configured to set at least one of a telephoto limit and a wide photo limit (see column 3, lines 31-35).

In regard to claims 29 and 45, Kasuya, US 6,134,390, in view of Uchida, US 5,929,904, discloses the lens control system and method for controlling the system as defined in claims 28 and 44, respectively. The Uchida reference discloses that least one of a telephoto limit and a wide photo limit is manually settable (see column 3, lines 31-35).

7. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, US 5,434,621, in view of Kasuya, US 6,134,390.

In regard to claim 11, Yu, US 5,434,621, discloses a lens apparatus, comprising:

a focus lens (see figure 3, element 12);

a zoom lens (see figure 3, element 11);

a controller (see figure 3, element 80); and

a control part (see figure 3, elements 20 and 90) which executes a control for moving the zoom lens based on a control signal provided from the controller (see column 4, lines 40-44) and executes a control based on a view angle correction function for moving the zoom lens to a position to prevent changing of a view angle (see column 6, line 48 to column 7, line 4);

wherein the controller has a limit function for obtaining, from the control part, a position signal representing a position of the zoom lens (see figure 3, elements 20 and column 4, lines 8-10) and for restricting a moving range of the zoom lens so that the zoom lens does not move to an outside of a predetermined limit position based on the position signal (see column 5, lines 20-25), wherein the control part comprises:

a limit position determining device (see figure 3, element 80) which determines the limit position by changing a value of the position signal being outputted from the control part to the controller from a value representing an actual position of the zoom lens (see column 6, lines 58-62) and detecting a change of the control signal outputted from the controller with respect to the changed value of the position signal (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63- column 7, line 4);

[When the object being captured moves or the photographer moves, the camera detects the zooms lens is out of position or outside of the limit and corrects the viewing angle by moving the zoom lens.]; and

a restricting device (see figure 3, element 80) which restricts a moving range of the zoom lens so that the zoom lens does not move to an outside of the limit position determined by the limit position determining device (see column 6, line 65 to column 7, line 4).

The Yu reference does disclose the view angle correction function the zoom lens position due to the movement of the focus lens.

Kasuya, US 6,134, 390, discloses a camera system wherein the control function provided in the lens apparatus includes a view angle correction function which is an operation of moving a zoom lens to prevent a change of a view angle due to moving of a focus lens (see column 1, lines 60-66).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Yu, US 5,434,621, in view of Kasuya, US 6,134,390, to have a view angle correction function which is an operation of moving a zoom lens due to moving of a focus lens in order to prevent a change of a view angle.

In regard to claim 12, Yu, 5,434,621, discloses a lens apparatus, comprising:

a focus lens (see figure 3, element 11);

a zoom lens (see figure 3, element 12);

a controller (see figure 3, element 80); and

a control part (see figure 3, elements 20 and 90) which executes a control for moving the zoom lens based on a control signal provided from the controller (see column 4, lines 40-44) and executes a control based on a view angle

correction function for moving the zoom lens to a position to prevent changing of a view angle (see column 6, line 48 to column 7, line 4),

wherein the controller has a limit function for obtaining, from the control part, a position signal representing a position of the zoom lens (see figure 3, elements 20 and column 4, lines 8-10) and for restricting a moving range of the zoom lens so that the zoom lens does not move to an outside of a predetermined limit position based on the position signal (see column 5, lines 20-25), wherein the control part comprises:

a position signal fixing device (see figure 3, element 80) which fixes, when executing the control based on the view angle correction function by the control part, a value of the position signal outputted from the control part (see column 5, lines 2-9) to the controller to a value representing a position of the zoom lens before executing the control based on the view angle correction function (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63-column 7, line 4);

[When the object being captured moves or the photographer moves, the camera detects the zoom lens is out of position or outside of the limit and corrects the viewing angle by moving the zoom lens.];

a limit position determining device (see figure 3, element 80) which determines the limit position by changing a value of the position signal being outputted from the control part to the controller from a value representing an actual position of the zoom lens (see column 6, lines 58-62) and detecting a

change of the control signal outputted from the controller with respect to the changed value of the position signal (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63- column 7, line 4); and

a restricting device (see figure 3, element 80) which restricts a moving range of the zoom lens so that the zoom lens does not move to an outside of the limit position determined by the limit position determining device (see figure 4 and column 6, line 63- column 7, line 4).

The Yu reference does not disclose the view angle correction function moves the zoom lens due to moving of the focus lens.

Kasuya, US 6,134, 390, discloses a camera system wherein the control function provided in the lens apparatus includes a view angle correction function which is an operation of moving a zoom lens to prevent a change of a view angle due to moving of a focus lens (see column 1, lines 60-66).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Yu, US 5,434,621, in view of Kasuya, US 6,134,390, to have a view angle correction function which is an operation of moving a zoom lens due to moving of a focus lens in order to prevent a change of a view angle.

In regard to claim 13, Yu, US 5,434,621, in view of Kasuya, US 6,134,390, discloses the lens apparatus as defined in claim 12. The Yu reference discloses that when the control signal provided from the controller changes by at least a predetermined value in a case where the position signal fixing device fixes the position signal, the control part executes a control for moving the zoom lens based on the control signal and the position

signal fixing device returns the position signal to a value indicating an actual position of the zoom lens (see column 6, line 58 to column 7, line 4).

8. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, as applied to claim 1 above, and further in view of Masunaga et al., US 5,838,368.

In regard to claim 5, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, discloses the lens system as defined in claim 1. The Kasuya and Uchida reference do not disclose that when the controls to be executed in the control part are overlapped at the same time, the control part selects one of the controls to execute in accordance with a predetermined selection process.

Masunaga et al., US 5,838,368, discloses a camera system with a priority designating device to give preference to one of the panning tilting and zooming control elements (see column 26, line 65 to column 27, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, and further in view of Masunaga et al., US 5,838,368, to have a priority designating device in order to eliminate conflicts when receiving multiple control signals.

In regard to claim 6, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, and further in view of Masunaga et al., US 5,838,368, discloses the lens system as defined in claim 5. The Kasuya reference discloses that the control of the movable lens includes a control of a zoom lens (see figure 1, element 6 and column 2, lines 39-44).

In regard to claim 7, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, and further in view of Masunaga et al., US 5,838,368, discloses the lens system as defined in claim 6. It would have been obvious to one of ordinary skill in the art to configure the Kasuya reference to perform the view angle correction function after the to the shot function of Masunaga has moved to the preset position in order to keep the object in the imaging window the same size.

In regard to claim 8, Kasuya, US 6,134,390 in view of Uchida, US 5,929,904, and further in view of Masunaga et al., US 5,838,368, discloses the lens system as defined in claim 6. The Kasuya, Uchida, and Masunaga references do not disclose that the control part executes the control based on the limit function prior to the view angle correction function in a case where the zoom lens moves to an outside of a limit position based on the limit function by executing the control based on the view angle correction function.

Official Notice is taken that it is well known of the art to move the zoom lens to the correct position before performing view angle correction because any corrections made before moving the lens would be invalid and have to be correct again, thus only one correction is needed when performed afterwards.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention of configure the Kasuya reference to have the control part execute the control based on the limit function prior to the view angle correction function as claimed in claim 4, in order to prevent the need for multiple view angle corrections.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

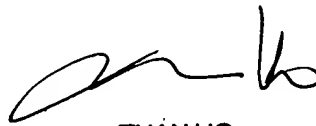
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 703-305-8623. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs

A handwritten signature in black ink, appearing to read 'Tuan Ho', is positioned above the printed name.

TUAN HO
PRIMARY EXAMINER